

REMARKS

At the time of the Official Action dated June 28, 2005, claims 1, 3, 5-8, 10-17, 19-21, and 23-25 were pending. In this Amendment and Response, claims 1, 8, 15, and 20 are being amended. No claims are being canceled and no new claims are being added. Accordingly, claims 1, 3, 5-8, 10-17, 19-21, and 23-25 remain currently pending.

In the Office Action, the Examiner provisionally rejected claims 1, 3-8, 10-17, 19, 20, 23, 24, 26, and 28-31 under the judicially created doctrine of obviousness-type double patenting. The Examiner also rejected claims 7, 8, 12, 13, 15, 20, 21, and 23 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,388,648 to Clifton et al. (“the Clifton reference”) in view of U.S. Patent No. 6,693,642 to Ogawa (“the Ogawa reference”). This rejection is discussed in detail below.

Claim Rejections under Doctrine of Obviousness-Type Double Patenting

In the Office Action, the Examiner provisionally rejected claims 1, 3-8, 10-17, 19, 20, 23, 24, 26, and 28-31 under the judicially created doctrine of obviousness-type double patenting. The Applicant respectfully asserts that this rejection is premature because no claims have been indicated to be allowable. Moreover, the Applicant reserves the right to substantively respond to the rejection when the Examiner indicates that subject matter is allowable.

Rejection Under 35 U.S.C. § 103 based on Clifton and Ogawa

With respect to the rejection of independent claims 1, 8, 15, and 20, under Section 103(a), the Examiner stated:

As per claim 1, Clifton et al., hereinafter Clifton, discloses a color video data correction filtering system, comprising:

a monitor profile that comprises monitor specific color characteristics and monitor specific input-output characteristics (Figure 13, item 170 and 172);

a plurality of a sets of gamut shifting arrays adapted to obtain the monitor specific color characteristics from the monitor profile to compensate for color point data of a plurality of constituent colors of a color monitor with each set of gamut shifting arrays corresponding to a multiplication look-up table (MLUT) comprising values that represent specific multiplication operations ("digital R, G, and B data conforming to the measured R, G, and B coordinate values will be converted by digital color space converter 170 to digital R, G, and B data conforming to the target R, G, B coordinate values", column 13, line 45-49).

Clifton discloses a color data correction system and an optional LUT to further modify the data. It is noted that Clifton does not explicitly disclose "a plurality of nonlinearization tables, each adapted to receive an input from one of the sets of gamut shifting arrays and to obtain the monitor specific input-output characteristics from the monitor profile to compensate for non-linearities of the color monitor and produce output color video data compensated for non-linearities and color points of the color monitor", however, this is known in the art as taught by Ogawa. Ogawa discloses a gradation correction method using conversion tables having different input/put characteristics (Abstract) to correct non-linearity of the display.

Thus, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Ogawa into Clifton because Clifton discloses a color data correction system and Ogawa discloses a monitor specific correction method in order to correct monitor specific irregularity.

7. As per claim 8, Clifton and Ogawa disclose a computer system with all the elements as rejected claim 1, and Clifton further discloses

Processor (Figure 13, item 162);

Video memory coupled to the processor (Figure 13, item 166); and

A color video data correction filtering system coupled to the processor (Figure 13, 170 and 172).

10. As per claim 15, Clifton and Ogawa disclose a method of color video data correction filtering, comprising all the elements as disclosed in claim 1, and therefore is similarly rejected as claim 1.

11. As per claim 20, Clifton and Ogawa disclose a color correction system, comprising all the elements as disclosed in claim 1, and therefore is similarly rejected as claim 1.

Official Action, pages 2-5.

The Applicant respectfully traverses this rejection. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (Bd. of Pat. App. & Inter. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (Bd. of Pat. App. & Inter. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

In the present case, the rejection is not appropriate because the prior art references that used to reject the claims do not disclose each and every element of the Applicant's claims. For example, independent claims 1, 8, and 20 recite "a *preset* monitor profile that comprises monitor specific color characteristics and monitor specific input-output characteristics." (Emphasis added). Similarly, independent claim 15 recites "retrieving monitor specific color characteristics and monitor specific input-output characteristics from a *preset* monitor profile." (Emphasis added). Thus, the Applicant's claims relate to a monitor profile that is preset and consequently stored in the monitor, requiring no user setting or selection. Further, independent claims 1 and 8 recite "a plurality of non-linearization tables, each adapted to receive a *linear* input from one of the sets of gamut shifting arrays." (Emphasis added). Similarly, independent claim 15 recites, "applying the plurality of non-linearization tables to the color point *linear* data." (Emphasis added). Likewise, independent claim 20 recites "applies the monitor specific input-output characteristics to the color point linearity corrected video data to produce non-linearity corrected video data." (Emphasis added). Accordingly, the plurality of gamut shifting arrays output *linear* video data to the CLUT 222-226 as shown in FIG. 2, and as set forth by the Applicant's claims. Consequently, a non-linear relationship exists between the data entering and the data exiting the CLUT 228-232. Application, paragraph 0034, and FIG. 2.

In contrast, the Clifton reference discloses an LCD projection unit employing “gamma correction values that are *user selectable* to control luminance and color balance. The lookup table values are determined by *measuring* the transmitted luminance of the LCD array in the projection unit.” Clifton, col. 2, line 67-col.3, line 3, (Emphasis added). Thus, the Clifton reference fails to disclose a preset and consequently stored monitor profile, but rather user selectable gamut shifting arrays and gamut shifting arrays that are obtained by measuring the luminance of the LCD. Accordingly, by enabling user selection and measurement of the relevant parameters for luminance and color balance technique, the Clifton reference relinquishes presetting a monitor profile for color correction filtering.

The Ogawa reference fails to disclose applying monitor specific input-output characteristics to color point linearity corrected video data *to produce non-linearity corrected video data*. (Emphasis added). Moreover, the Examiner points out that: “Ogawa discloses a gradation correction method using conversion tables having different input/output characteristics (Abstract) to correct non-linearity of the display.” Office Action, pp. 3. Accordingly, the conversion tables of the Ogawa reference *linearize non-linear* input data, where the Applicant’s correction tables *non-linearize linear* input data, as set forth in the Applicant’s claims and specification. Application, paragraph 0034; (Emphasis added), *see* FIG.2. Further, as set forth by the Ogawa reference:

[T]he gradation characteristic between the original input signal D_{in} and the output brightness N becomes a *linear* characteristic of the brightness/signal conversion unit 12 shown by the curve (i) in FIG. 4. This operation is expressed schematically as an operation causing the gradation characteristic between the input signal D_{in} and the brightness N to become *linear* as shown in FIG. 5C.

Ogawa, col. 6, lines 23-29,(Emphasis added); *see also* FIG. 4, and FIG. 5C.

Thus, in the Ogawa reference, a *linear* relationship exists between the input and the output data undergoing gradation. Consequently, the application of the conversion tables of the Ogawa reference is inconsistent with the Applicant's claims.

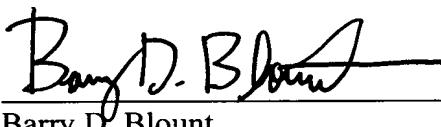
Accordingly, the Clifton and the Ogawa references, either alone or together, fail to disclose all of the elements of the Applicant's claims. For at least these reasons, the rejection of all claims under Section 103 based on the combination of the Clifton and Ogawa references is improper and should be withdrawn. An indication of the allowability of all claims is earnestly solicited.

Conclusion

In view of the remarks set forth above, the Applicant respectfully requests withdrawal of all of the Examiner's rejections. Furthermore, the Applicant asserts that an indication of the allowability of claims 1, 3-5-8, 10-17, 19-21 and 23-25 is appropriate. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: August 29, 2005



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